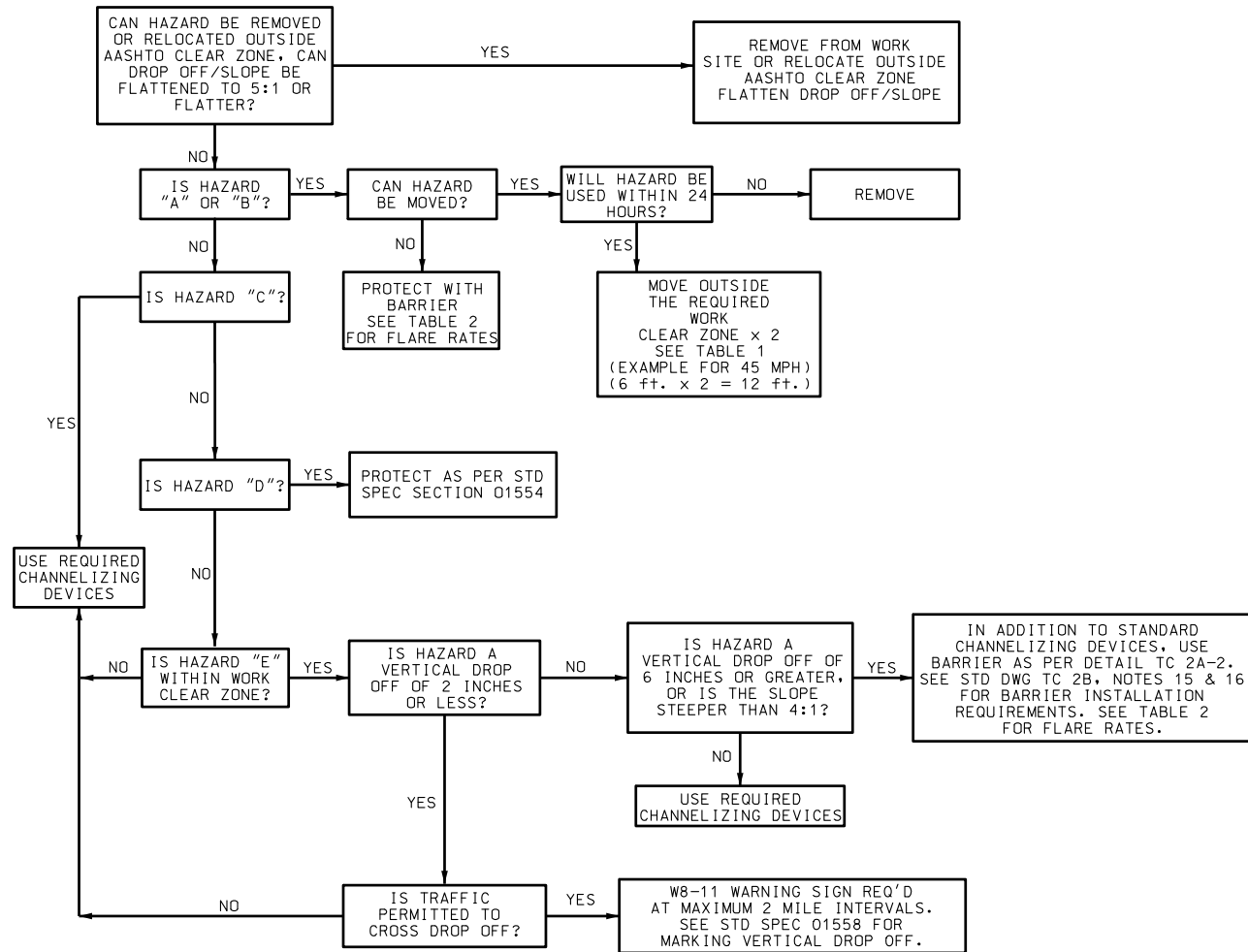


DGN File: L:\Standard Drawings\Imperial\2005\Approved\X-Supplemental Issues\Supp2Approved\TC2A.dgn 08-MAY-2007

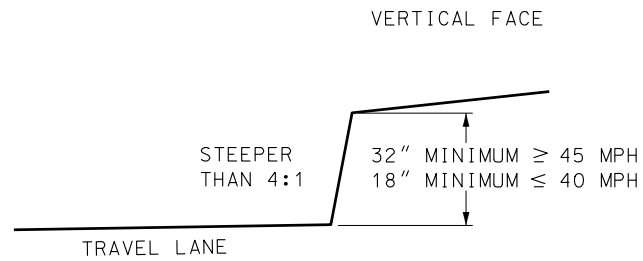
## HAZARD MITIGATION

- USE DETAIL TC 2A-1 AND TABLE 1 (WORK CLEAR ZONE) WHEN MITIGATING THE FOLLOWING HAZARDS:
  - NON-WORKING EQUIPMENT OR VEHICLES
  - STOCKPILED MATERIAL
  - WORKING VEHICLES AND WORKERS (NON-FLAGGERS)
  - OTHER OBJECTS AND FEATURES (I.E.: BRIDGE PARAPETS, BARRIER BLUNT ENDS, POLES)
  - SLOPES STEEPER THAN 4:1 OR A VERTICAL DROP OFF\* OF LESS THAN 48 INCHES (SEE DETAIL TC 2A-2 FOR EXAMPLES)
- MITIGATE ALL OTHER HAZARDS, SLOPES STEEPER THAN 4:1, OR VERTICAL DROP OFFS\* 48 INCHES OR GREATER WITHIN AASHTO CLEAR ZONE AS APPROVED BY THE REGION TRAFFIC ENGINEER.

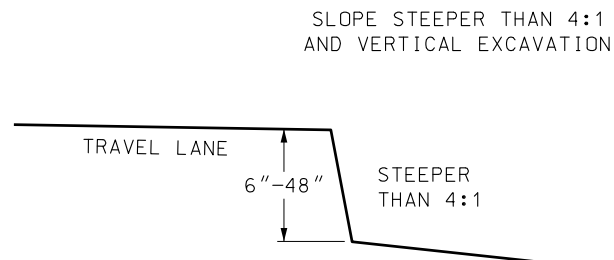


DETAIL TC 2A-1

\* DROP OFF IS A VERTICAL DIFFERENCE THAT MAY BE FROM THE WORK TO THE ROADWAY OR THE ROADWAY TO THE WORK.



BARRIER REQUIRED UNLESS FORESLOPE IS A SMOOTH UNIFORM SURFACE OF SUITABLE MATERIAL TO REMAIN STABLE AND NOT SPALL AT SPEED AND HEIGHT SHOWN



WITHIN WORK CLEAR ZONE USE BARRIER  
OUTSIDE WORK CLEAR ZONE USE DEVICES  
> 48" OBTAIN APPROVAL FROM REGION TRAFFIC ENGINEER

## TYPE "E" VERTICAL DROP OFF HAZARDS DETAIL TC 2A-2

TABLE 1 WORK CLEAR ZONE	
MPH	FEET
40 & LESS	3
45	6
50	6.5
55	7.5
60	8
65	8.5
70	9
75	10.5

TABLE 2 WORK ZONE FLARE RATES TEMPORARY BARRIER	
MPH	FLARE
70	20:1
65	18:1
60	17:1
55	16:1
50	14:1
45	10:1
40	6:1

SUPPLEMENTAL DRAWING

UTAH DEPARTMENT OF TRANSPORTATION  
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION

RECOMMENDED FOR APPROVAL BY THE STATE ENGINEER

CHAIRMAN STANDARDS COMMITTEE

APPROVED

DEPUTY DIRECTOR

HAZARD  
MITIGATION

STANDARD DRAWING TITLE

STD DWG  
TC 2A

REVISIONS  
1 04/26/07 JL TITLE CHANGED, DRAWING COMPLETELY MODIFIED.

NO. DATE APPR. REMARKS